

Teyssler, J.

Do you correct data of manometers? p. 213. ENERGETIKA.
(Ministerstvo paliv a energetiky. Hlavni sprava elektraren)
Praha. Vol. 6, no. 5, May 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

TEYSSLER, VLADIMIR

"Technicka mereni ve strojnictvi; tlak, teplota, teplo a vlnkost. Celostatni vysokoskolska ucebnice. 4., doplnene vyd. Praha, Statni nakl.technicke literatury, 1956. (Technical measurements in the machinery industry; pressure, temperature, heat, and humidity; a university textbook. 4th enl. ed. illus., diags., footnotes, graphs, index, tables)"

319 p. (Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,
September 1958

BOZHKO, G.K.; TEYTEL', A.M.

Sheep raising farms in the Ukraine are ridded of brucellosis.
Veterinariia 41 no.6:4-7 Je '64. (MIRA 18:6)

1. Zamestitel' nachal'nika Upravleniya veterinarii Ministerstva
proizvodstva i zagotovok sel'skokhozyaystvennykh produktov
Ukrainskoy SSR (for Bozhko). 2. Glavnyy vrach Upravleniya
veterinarii Ministerstva proizvodstva i zagotovok sel'skokho-
zyaystvennykh produktov UkrSSR (for Teytel').

35029

8/689/81/000/001/027/00
B205/DEC5

18.1210 (2408)

AUTHOR: Teytel', I.L.

TITLE: Investigating the process of recrystallization and cooling of aluminum alloy ingots up to 800 mm in diameter by the continuous casting method

SOURCE: Fridiyander, I.N., V.I. Dobatkin, and Ye.D. Sakharov, eds. Deformiruyemye alyuminiyevyye splyavy; sbornik statey. Moscow, 1961, 208 - 209

TEXT: The main difficulties encountered in the continuous casting of large ingots of high-strength aluminum alloys B95 and D16 (V95 and D16) are connected with their tendency towards cracking. Under the leadership of V.I. Dobatkin a method was worked out which enables the casting of quality ingots of V95 alloy up to 800 mm in diameter and D16 and AK8 alloys up to 1000 mm by the continuous casting method using direct water cooling. The investigation was carried out using the D1 alloy since this alloy by itself does not undergo cracking. Into every ingot 4 to 8 thermocouples were frozen in and the cooling
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S/689/61/000/000/027/050
D205/D303

Investigating the process of ...

curves were recorded. From these, the size of the transition region, the intensity of cooling and the temperature gradients in various directions were estimated. The mechanical properties of the ingots and strips pressed from them were also investigated. The results have shown that with the increase of the casting velocity of 360 mm ingots of D1 alloy, the temperature gradient along the ingot axis is considerably lowered, while the gradient in the transverse direction is slightly increased. Investigation of the mechanical properties showed that with the increase in casting velocity the plasticity of the central layers of the ingot was decreased. Extent of this decrease is comparable to the extent of the temperature gradient decrease along the ingot axis. Thus, the relation between the two is established. Dimensions of the transition region increase in the vertical direction with the increase of the casting velocity. It is impossible to decrease the grain size of the intermetallic compounds which separate in the transition region, by the decrease in casting velocity of large diameter ingots, and therefore they will always be of poorer quality than smaller ingots of the same composition. It is therefore expedient to lower the amount of components forming the intermetallic

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S/688/01/000/000/027/0,
D205/D503

Investigating the process of ...

compounds. Three necessary conditions are stipulated for the casting of good quality ingots of large dimensions: 1) Continuous casting with direct water cooling. 2) Low casting velocity into low-shape crystallizers. 3) Control of the composition with respect to the intermetallic compounds formation. By applying these conditions an industrial technology was worked out for casting D16 and AK6 alloy ingots up to 1000 mm diameter, V95 up to 800 mm and AK6 up to 1200 mm. The contributions to the field of S.M. Voronov, V.A. Livanov, and V. I. Dobatkin are mentioned. There are 6 figures, 1 table and 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: A.L. Taylor, D.M. Thompson and I.S. Wegner, Aluminum Ingots, Metal Progress, 1957, no. 5, p. 72; W. Roth, Aluminum, 1945, no. 7 - 8.

Card 3/3

S/689/84/000/00 /028/030
D205/D303AUTHOR: Teytel', I.L.TITLE: Casting technology and quality of large diameter ingots
made of high-strength aluminum alloysSOURCE: Fridlyander, I.M., V.I. Dobatkin, and Ye.D. Zakharov, eds.
Deformiruyemye alyuminiyevyye splavy; sbornik statey.
Moscow, 1961, 210 - 213

TEXT: The mechanical properties of forgings, made of large ingots of aluminum alloys, and in particular the plasticity in the transverse direction, are of first importance in the production of large construction elements made of the aforesaid alloys. It was shown previously that the decrease in the total content of Si and Fe in the D16 (D16) alloy in both hardened and non-hardened states, increases the relative elongation. It was also shown that the casting velocity is to be low and the crystallizer height small. On the basis of these principles ingots 800 mm in diameter of B95 (V95) alloy and 1000 mm D16 and AK8 ingots were cast and their mechanical properties compared.

Card 1/2

Casting technology and quality of ...

S/889/61/000/000/022/030
D205/D303

pared with those of 270 and 360 mm ingots. From the large ingots co-
res comparable in size to the serial ingots (360 mm) were produced
by turning, and pressed along with the serial D16 ingots into strips.
The mechanical properties of both strips were almost equal. The ave-
rage density of the 800 mm ingots was compared with that of the 270
mm ingot and the respective figures were 2.766 and 2.785 g/cm³ for
the D16 alloy and 2.822 and 2.855 for the V95 alloy. 650 and 800 mm
diameter V95 alloy ingots were forged into articles with cross-sec-
tions ranging from 130 mm to 400 mm. No cracks were observed in the
directly water-cooled ingots. There are 1 figure and 2 tables.

Card 2/2

TEYTEL, I.L.

137-58-2-2903

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 99 (USSR)

AUTHOR: Teytel', I.L.

TITLE: Scabs in Aluminum-alloy Forgings (Pleny v shtampovkakh alyuminiyevykh splavov)

PERIODICAL: V sb.: Metallurg. osnovy lit'ya legkikh splavov. Moscow, Oborongiz, 1957, pp 289-297

ABSTRACT: The defects in the form of oxide scabs encountered in aluminum-alloy forgings greatly impair their transverse strength. It is noted that as the metal is let out through the lower tap hole the number of scabs progressively decreases; as it pours through the upper tap hole, the reverse occurs. It is shown that refining has but little effect on the impurity content. The metal in the ladle is purified more thoroughly by chlorination than by fluxing. An increase in air moisture or blowing hydrogen and steam through the metal increases the impurity and gas content.

P.V.

1. Aluminum alloy forgings--Impurities

Card 1/1

S/137/62/000/005/047/150
A006/A101

12.1210

AUTHOR: Teytel', I.L.

TITLE: Casting technology and quality of large-section ingots made of high-strength aluminum alloys

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 30, abstract 5G196 (V sb. "Deformiruyemye alyumin. splavy", Moscow, Oborongiz", 1961, 210 - 213)

TEXT: Information is given on mechanical properties of some large-size ingots and articles produced of them, as compared to those of series-produced ingots of 270 and 360 mm in diameter. Average density of ingots, 800 mm in diameter, is slightly below that of ingots 270 mm in diameter, and is for alloy Д16 (D16) 2.766 and 2.783 g/cm² respectively, and for alloy B 95 (V95) 2.822 and 2.835 g/cm². The density of the central portion of large-size ingots is practically the same as density of this portion in medium-size ingots. Properties of pressed strips and forgings are presented. See also the preceding abstract.

B

G. Svodtseva

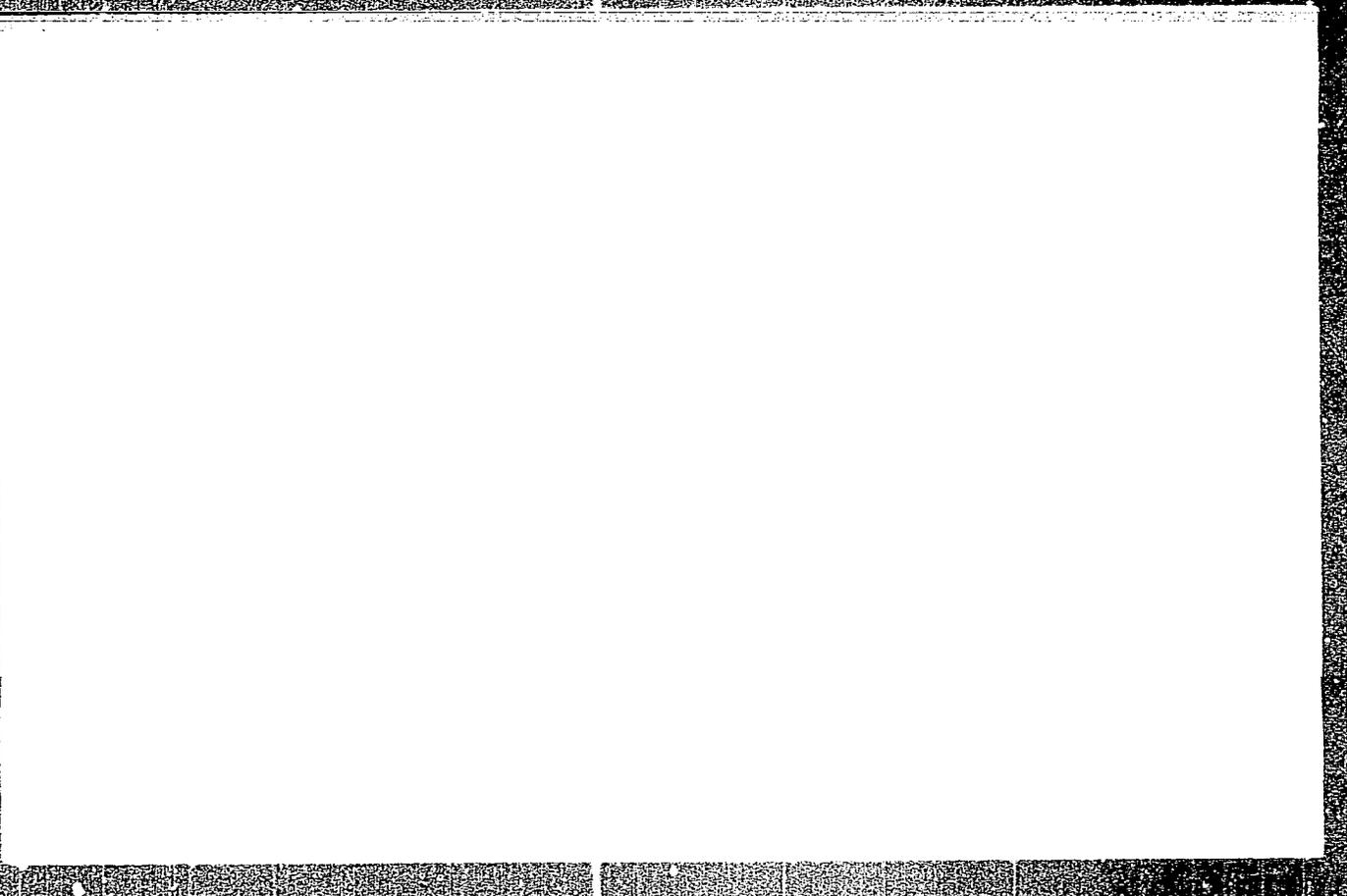
[Abstracter's note: Complete translation]

Card 1/1

SOURCE INFORMATION

TOPIC TAGS: residual stress, aluminum quenching, aluminum billet, aluminum alloy

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001755520006-0



APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001755520006-0"

LESIN'SH, K.P. [Lesins, K.], kand.veter.nauk, otv.red.; VAYVARINA, G.F. [Vairarina, G.], kand.veter.nauk, red.; LAZDYNYA, M.A. [Lazdina, M.], red.; TSINOVSKIY, Ya.P., doktor biolog.nauk, red.; TEYTEL'BAUM, A., red.; PILADZE, Ye., tekhn.red.

[Problems in parasitology in the Baltic republics; materials] Voprosy parazitologii v pribaltiiskikh respublikakh; materialy. Riga, Izd-vo Akad.nauk Latviskoi SSR, 1961. 292 p. (MIRA 15:5)

1. Nauchno-koordinatsionnaya konferentsiya po problemam parazitologii v Pribaltike. 2d, Riga, 1960. 2. Institut biologii AN Latv.SSR (for Lesin'sh). 3. Latviyskaya sel'skokhozyaystvennaya akademiya (for Vayvarina). 4. Sanitarno-epidemiologicheskaya stantsiya Ministerstva zdravookhraneniya Latviyskoy SSR (for Lazdynya).
(BALTIC STATES--PARASITOLOGY)

S/137/62/000/005/048/150
A006/A101

AUTHOR: Teytel', I. L.

TITLE: Investigating crystallization and cooling processes of aluminum alloy ingots up to 800 mm in diameter in continuous casting

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 30 - 31, abstract 5G197 (V sb. "Deformiruyemyye alyumin. splavy", Moscow, Oborongiz, 1961, 200 - 209)

TEXT: To obtain high-quality large-diameter ingots, the following conditions should be observed: 1) continuous casting must be used with immediate water-cooling of the ingot; 2) teeming should be performed at a low rate into a low crystallizer; 3) the composition of the alloys must be regulated in respect to the content of some impurities and alloying admixtures. A rise of ductility of the ingot by controlling the composition of the alloys in respect to some components, and the selection of optimum casting conditions make it possible to produce large-diameter ingots without cracks. An industrial technology was developed to produce high-quality ingots from Π 16 (D16) and AK8 alloys up to

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Investigating crystallization and...

S/137/62/000/005/048/150
A006/A101 .

1,000 mm in diameter, B 95 (V95) up to 800 mm in diameter and AK6 up to 1,200 mm
in diameter.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

TEYTEL, N.S.

Arrangement for drawing thin glass fibers. Patent U.S.S.R. 78,248, Dec.31,
1949.
(CA 47 no.19:10193 '53)

TEYTEL', N. S.

IR 840114

USSR/Electricity - Instruments

Apr 52

"Three-Phase Loss Counter," Docent N. S. Teytel'

From Energet, No 4, pp 12-13

Describes and gives circuit diagram of 3-phase I^2 -hr counter (used for calcg losses in Cu transmission lines and transformers). This circuit, developed by author, does not require use of phase-shifting equipment. Type S and B_2 counters were converted to this circuit at lab of Energosbyt, Rostovenergo, and tests on them have shown positive results.

248140

TEYTEL', N.S.; YAGNICH, M.M.

Application of magnetic starters for electric motors used in
agriculture. Sel'khoz mashina no.12:25-27 D '53. (MLRA 6:12)
(Electric motors)

TEYTEL', N. S.

AID P - 2531

Subject : USSR/Electricity
Card 1/1 Pub. 26 - 15/32
Author : Teytel', N. S., Dots.
Title : ~~On possible use of flywheel effect as a source of~~
reserve energy
Periodical : Elek sta, 6, 41-42, Je 1955
Abstract : The use of the flywheel effect for emergency lighting,
switch control, etc., is advocated. The article is one
in a series of discussions on this subject. One diagram.
Institution : Novocherkassk Institute of Reclamation Engineering
Submitted : No date

GINGOL'D, N.; TEYTEL, P.

Differential diagnosis of chronic myelosis from leukemoid reactions.
Probl.gemat.i perel.krovi 4 no.9:28-29 S '59. (MIRA 13:1)

1. Iz Instituta gematologii i perelivaniya krovi (dir. - prof. K.T.
Nikolau), Bukharest.
(LEUKEMIA MYELOCYTIC diag.)

TEYTEL'BAUM, (chief)

Repair Plant Gorged with Unwanted Equipment — Baku, Bakinskiy Rabochiy,
13 May 54

Unfortunately, neither the Azneft' Association nor the ministry has given any thought to the need for storage of repaired equipment, nor to the consequences of amassing it at the repair plant. If nobody needs any drilling equipment now, then the Plant imeni Pervoye Maya is justified in demanding that it be assigned production of some kind of equipment which is needed. — P. Alekseyev, shop chief; N. TEYTEL'BAUM, chief, Production Division; and M. Azaryants, chief, Commercial Division; all of the Baku Plant imeni Pervoye Maya

SO: SUM 262, 4 Nov 1954

TURCHINS, Ya.B., otv. red.; PURIN, V.R., kand. ekon. nauk, red.; TUMSHEVITS,
V.F., kand. ekon. nauk, red.; SOMS, R.V., red.; TEYTEL'BAUM, A., red.;
LEVI, S., red.; PILADZE, Ye., tekhn. red.

[Developing the national economy of the Latvian S.S.R.] Razvitie narod-
nogo khoziaistva Latviiskoi SSR; sbornik statei. Riga, Izd-vo Akad.
nauk Latviiskoi SSR, 1961. 461 p. (MIRA 14:11)

1. Latvijas Padomju Sotsialistiskas Republikas zinatnu akademiya. Eko-
nomikas institut.

(Latvia--Economic conditions)

PROSVIRIN, V.I., doktor tekhn.nauk, red.; VINOGRADSKAYA, Ye.L.,
kand. tekhn. nauk, red.; TARASOV, B.Ya., red.;
TEYTEL'BAUM, A., red.

[Transformations in alloys and the interaction of phases]
Prevrashcheniia v splavakh i vzaimodeistvie faz. Riga, Izd-
vo AN Latv.SSR. Vol.2. 1963. 94 p. (MIRA 17:4)

1. Latvijas Padomju Socialistiskas Republikas Zinatnu Akademijs.
Automatikas un mekhanikas instituts.

FILIPPOV, M.V., kand. tekhn. nauk, otv. red.; KIRKO, I.M., doktor fiz.-mat. nauk, red.; BIRZVALK, Yu.A. [Birzvalks, J.], kand. tekhn. nauk, red.; LIYELAUSIS, O.A. [Lielausis, O.], kand. fiz.-mat. nauk, red.; TSINOBER, A.B. [Cinobers, A.], red.; UKERMARKA, R.P., red.; SAVEL'YEVA, Ye., red.; TEYTEL'BAUM, A., red.; LEMBERGA, A., tekhn. red.

[Reports delivered at the Third Conference on Theoretical and Applied Magnetohydrodynamics in Riga, July 2-7, 1960] Doklady, pročitannye na... Riga, Izd-vo AN Latviiskoi SSR. Sec.3. [Problems in magnetohydrodynamics] Voprosy magnitnoi gidrodinamiki. 1963. 408 p. (MIRA 17:4)

1. Soveshchaniye po teoreticheskoy i prikladnoy magnitnoy gidrodinamike. 3d, Riga, 1962. 2. Chlen-korrespondent AN Latviyskoy SSR (for Kirko).

FILIPPOV, M.V., kand. tekhn. nauk, red.; KIRKO, I.M.,
doktor fiz.-mat. nauk, red.; LIELPETER, Ya.Ya.
[Lielpetere, J.], kand. tekhn. nauk, red.; SERMON, G.Ya.,
red.; TEYTELBAUM, A., red.

[Problems of magnetohydrodynamics; reports] Voprosy mag-
nitnoi gidrodinamiki [doklady]. Riga, Akad. ~~nauk~~ Lat-
viiskoi SSR, Vol. 1. 1964. 143 p. (MIRA 18:12)

1. Soveshchaniya po teoreticheskoj i prikladnoj magnitnoy
gidrodinamike, 39. Riga, 1962.

KARLSON, K.P. [Karlsone, K.], red.; BAYARS, V. [Bajars, V.], red.
STONANS, Ja., red.; DALBIN', M.Ya. [Dalbins, M.], red.;
PLATNIYEKS, R.F. [Platnieks, R.], red.; LAPUSHONOK,
Yu.K., red.; TEYTEL'BAUM, A., red.; BITAR, A., tekhn.
red.

[Transactions of the Conference on the New Methods of the
Efficient Use of Local Fuels held in Riga, September 2 to
5, 1958] Trudy soveshchaniia po novym metodam ratsional'-
nogo ispol'zovaniia mestnykh topliv, Riga, 1958.

(MIRA 16:5)

1. Soveshchaniye po novym metodam ratsional'nogo ispol'zo-
vaniya mestnykh topliv, Riga, 1958. 2. Institut khimii Akademii
nauk Latviyskoy SSR (for Bayars, Dalbin').
(Fuel--Congresses)

SHUL'TS, Pavel Indrikovich [Shul'cs, P.]; TEYTEL'BAUM, A. [Teitelbaums, A.],
red.; INKIS, R., tekhn. red.

[Specialization and concentration of the manufacture of metal cutting tools in the machinery industry of the Latvian S.S.R.] Spe-
tsializatsiia i kontsentratsiia proizvodstva instrumentov v ma-
shinostroeni Latvii SSR. Riga, Izd-vo Akad. nauk Latvii SSR, 1958. 148 p.
(MIRA 15:12)
(Latvia--Metal-cutting tools)

TEYTELBAUM, A., red.; CHAKSH, Ye., tekhn. red.

[Soviet Baltic Republics in the fraternal family of Soviet peoples]
Sovetskaia Pribaltika v bratskoi sem'e narodov SSSR; materilay.
Riga, Latviiskoe gos. izd-vo. Vol.3. 1960. 111 p. (MIRA 14:11)

1. Mezhhrespublikanskiy seminar-soveshchaniye, Riga, 1960.
(Baltic States--Economic conditions)

DOROSHENKO, Vasilii Vasil'yevich; TEYTEL'BAUM, A., red.; LEMBERGA, A.,
tekh. red.

[Outline of Latvian agricultural history in the 16th century] Ocherki
agrarnoi istorii Latvii v XVI veke. Riga, Izd-vo Akad. nauk Lat-
viiskoi SSR, 1960. 322 p. (MIRA 14:11)
(Latvia--Agriculture) (Latvia--Land tenure)

KATLAP, Manfred Ansovich [Katlaps, M.]; TEYTEL'BAUM, A., red.; BOKMAN, R.,
tekhn. red.

[Sheep breeding in the Latvian S.S.R. and ways for increasing its
productivity] Sostoianie ovtsevodstva v Latviiskoi SSR i puti po-
vysheniia ego produktivnosti. Riga, Izd-vo Akad.nauk Latviiskoi
SSR, 1956. 133 p. (MIRA 14:12)
(Latvia--Sheep breeding)

LAPIN', Iiga Martynovna [Lapins, I.]; TEYTEL'BAUM, A., redl;
LEMBERGA, A., tekhn. red.

[Biology and parasites of small forest mammals of the
Latvian S.S.R.] Biologija i parazitofauna melkikh lesnykh
mlekopitaiushchikh Latviiskoi SSR. Riga, Izd-vo AN Latviiskoi
SSR, 1963. 134 p. (MIRA 16:11)

(Latvia--Parasites--Mammals)

(Latvia--Forest fauna)

VAYVAD, Al'bert Yakovlevich [Vaivads, A.]; GOFMAN, Boris Ernestovich
[Hofmans, B.]; KARLSON, Karl Petrovich [Karlsons, K.]; TEYTEL'-
BAUM, A. [Teitelbaums, A.], red.; BOKMAN, R. [Bokmans, R.], tekhn.
red.

[Dolomitic binders] Dolomitovye viazhushchie veshchestva. Riga,
Izd-vo Akad.nauk Latviskoi SSR, 1958. 258 p. (MIRA 14:12)
(Dolomite) (Binding materials)

RATNIYEKS, El'vira Avgustovna [Ratnieks, Elvira]; YAKUBAYTIS, E.A.
[Jakubaitis, E.], kand.tekhn.nauk, otv.red.; TETTEL'BAUM, A.,
red.; PARGLIS, Ya. [Paeglis, J.], tekhn.red.

[Electric power plant for passenger cars] Elektricheskaia
stantsia dlia passazhirskogo vagona. Riga, Izd-vo Akad.nauk
Latviskoi SSR, 1960. 52 p. (MIRA 14:12)
(Railroads---Electric equipment)

PLAUDE, Karl Karlovich; GRISLIS, Viktor Yanovich; TEYTEL'BAUM, A.,
red.; LEMBERGA, A., tekhn. red.

[Automatic control of the customer inlet systems in buildings
with heating supplied from central stations] Avtomatizatsiia
abonentskikh vvodov teplofitsirovannykh zdaniï. Riga, izd-vo
Akad. nauk Latvïiskoi SSR, 1961. 29 p. (MIRA 15:3)
(Heating from central stations) (Automatic control)

BRUKLEN, Aynis Petrovich; MUNTERS, V. [translator]; TEYTEL'BAUM, A.,
red.; CHAKSH, Ye. [Caks, E.], tekhn. red.

Koknese. Riga, Latviiskoe gos. izd-vo, 1960. 84 p.
(MIRA 15:8)

(Koknese--Guidebooks)

RABINOVICH, I.M.; IKAUNIYEK, Ya.Ya. [Ikaunieks, J.], kand. fiz.-
mat. nauk, nauchn. red.; TEYTEL'BAUM, A., red.

[Watching over precision; pages from the life and activity
of F.I.Blumbakh] Na strazhe tochnosti; stranitsy iz zhiz-
ni i deiatel'nosti F.I.Blumbakha. Riga, Latviiskoe gos.
izd-vo, 1965. 81 p. (MIRA 18:5)

1. Direktor Astrofizicheskoy laboratorii AN Latviyskoy SSR
(for Ikauniyek).

PELEKIS, L.L., kand. fiz.-mat. nauk, otv. red.; PROKOF'YEV, P.T.,
kand. tekhn. nauk, red.; CHUDAR, Ya.E., kand. fiz.-mat. nauk,
red.; YANUSHKOVSKIY, V.A., red.; TEYTEL'BAUM, A. [Teitelbaum, A.],
red.; BOKMAN, R., tekhn. red.

[Methods for studying radioactive radiation] Radioaktivnye izlu-
cheniia i metody ikh issledovaniia. Riga, Izd-vo Akad. nauk
Latviiskoi SSR, 1961. 141 p. (MIRA 15:4)

1. Latvijas Padomju Socialistiskas Republikas Zinatnu Akademijs.
Fizikas instituts. (Radioactivity)

KUKAYN, Rita Aleksandrovna [Kukaine, R.]; TEYTEL'BAUM, A. [Teitelbaum, A.], red.;
LEMEERGA, A., tekhn. red.

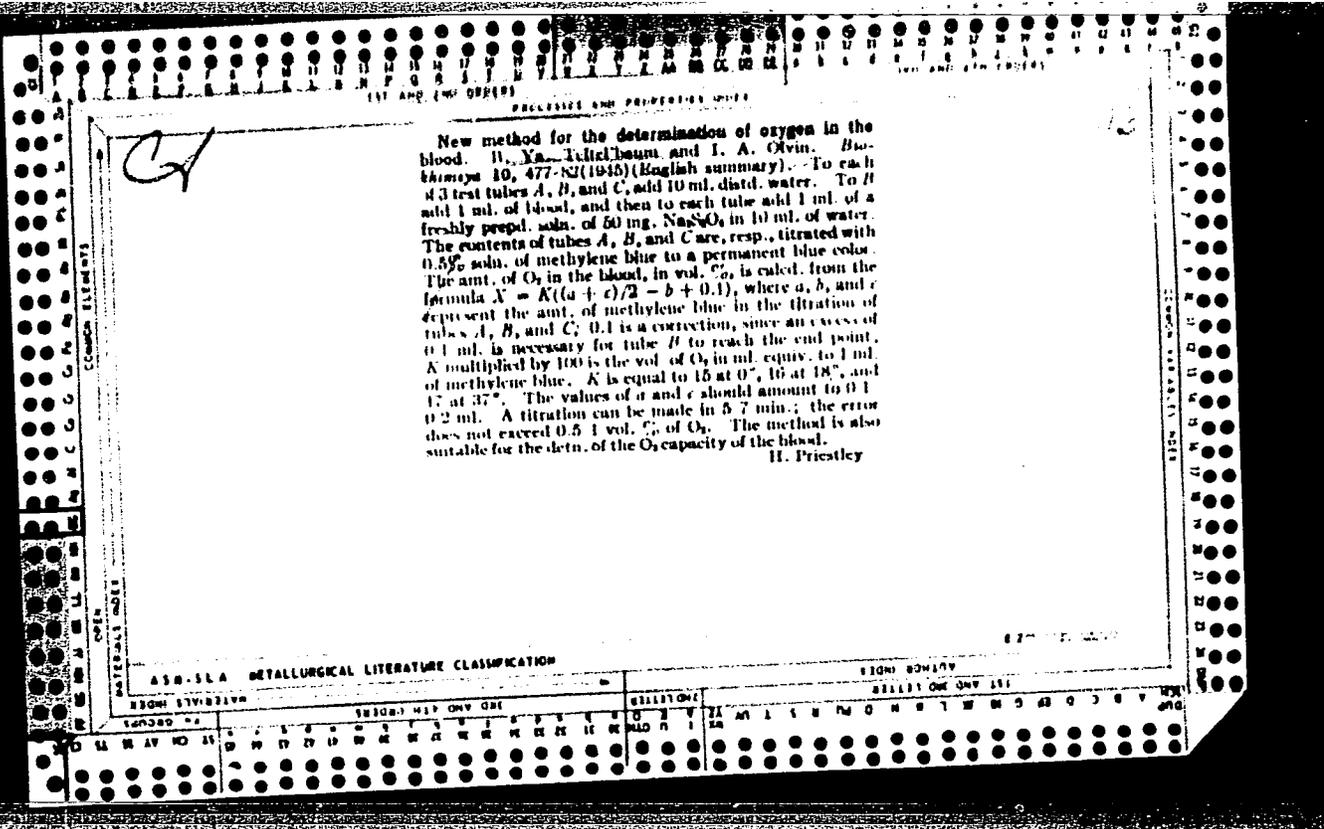
[Immunology and prospects for the extermination of poliomyelitis in the Latvian S.S.R.] Immunologija i perspektivy likvidatsii poliomiellita v Latviiskoi SSR. Riga, Izd-vo Akad. nauk Latviiskoi SSR, 1961. 169 p. (MIRA 15:3)
(LATVIA—POLIOMYELITIS)

SAVCHENKO, Vasilii Ivanovich; TEYTEL'BAUM, A., red.; LEMBERG, A.,
tekh. red.

[The Latvian Guards] Gvardeiskaia latyshskaia. Riga, Izd-vo
Akad. nauk Latviiskoi SSR, 1961. 166 p. (MIRA 15:3)
(Russia--Army--History)
(World War, 1939-1945)

TEYTEL'BAUM, A.I.

Coefficient of lateral pressure on granular materials. Trudy
VODGEO no. 11:21-22 '65 (MIRA 19:1)



SHAGIDULLIN, R.R.; ZAGIDULLIN, V.K.; TEYTEL'BAUM, B.Ya.

Attachments to the infrared spectrophotometers UK-10 and IKS-14.
Zav. lab. 30 no.1:107-108 '64. (MIRA 17:9)

1. Khimicheskiy institut AN SSSR, Kazan'.

5(0)

AUTHORS: Voskresenskaya, N. K., Taytal'baum, B. Ya. SOV/78-4-9-1/44

TITLE: Nikolay Aleksandrovich Trifonov (Obituary)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol. 4, Nr 9,
pp 1945-1951 (USSR)

ABSTRACT: On December 9, 1958, in Kazan', Professor N. A. Trifonov died. He was born in Peterburg on February 23, 1891, completed his education at the secondary school in Novgorod in 1909, and studied at the Peterburgskiy politekhnicheskii institut (Peterburg Polytechnic Institute) under the guidance of N. S. Kurnakov, V. A. Kistyakovskiy, P. P. Fedot'yev, A. F. Ioffe and A. A. Baykov). His diploma work treated the subject of heterogeneous equilibria. From 1917 to 1919 he was Head of the Laboratory for Chemical Preparations of the Petrogradskiy oblastnoy komitet po snabzheniyu Armii (Petrograd oblast' Committee for the Supply of the Army). Since 1919 Trifonov worked at Saratov University, first at the Chair of Inorganic and Physical Chemistry, later as Head Assistant at the Chair of Physics under Professor K. A. Leont'yev, a pupil of P. P. Lebedev. Trifonov gathered a group of students

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Nikolay Aleksandrovich Trifonov (Obituary)

SOV/78-4-9-1/44

(N. K. Voskresenskaya, S. I. Cherbov, T. A. Samartsev, R. V. Mertslin, K. I. Samarina, P. D. Dankov), who were working at various educational establishments or laboratories in Saratov, and who devoted their free time to work under Trifonov. Together with the physicist P. V. Golubkov and the chemist V. Ya. Anosov the analysis of liquid systems was developed. Since 1928 Trifonov was Head of the Chair of Inorganic and Physical Chemistry at Perm' University. From 1933 to 1939 Trifonov worked at the Institutes for Highway Construction of the GUSHOSSDOR of the NKVD (Glavnoye upravleniye shosseynykh dorog - Main Administration of Highways), first in Moscow, and since 1937 in Saratov. Since 1939 he was Head of the Chair of Physical and Colloid Chemistry of Rostov University, and in 1940 defended his doctoral thesis. The subject of this thesis was the physico-chemical analysis of binary liquid systems on the basis of the shape of the isothermal lines of the surface tension. It had been written at the Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR (Institute of General and Inorganic Chemistry of the Academy of Sciences, USSR). Since 1944 Trifonov was

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Nikolay Aleksandrovich Trifonov (Obituary)

SOV/78-4-9-1/44

Head of the Chair of Physical and Colloid Chemistry at Kazan' University and the Department of Physical Chemistry of the Kazan' Branch of the AS USSR. Together with coworkers he made a detailed investigation of the systems nitric acid - acetic acid (with S. P. Miskidzhyan), phosphorus trichloride - benzaldehyde (with F. F. Fayzullin), and dioxane - water (with M. Z. Tsypin). Together with R. V. Mertslin he investigated the temperature dependence of the surface tension of solutions, and illustrated the equations given by K. M. Stakhorskiy for normal binary systems. With R. V. Mertslin, A. T. Khalezova, G. K. Aleksandrov et al he studied the chemical influence of the isothermal lines of the surface tension. Trifonov's dissertation formed the basis for the research work of his school: I. F. Taykov, K. N. Kovalenko, O. A. Osipov, V. F. Dedushenko, B. Ya. Teytel'baum et al. In connection with the studies of P. A. Rebinder on the adsorptive lowering of hardness Trifonov, together with Ye. Ye. Gorbovskiy, N. P. Chernyak, and other coworkers, discovered the effect of increasing hardness by physico-chemi-

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Nikolay Aleksandrovich Trifonov (Obituary)

SOV/78-4-9-1/44

cal methods. Trifonov devoted his time to the extension of his main field of investigation, the analysis of fluid systems, by inclusion of the thermodynamical properties. This was partly realized by his pupils N. L. Yaryy-Agayev (heats of mixing), and M. P. Dianov (boiling points) at a time, when Trifonov was already seriously ill. Trifonov wrote more than 100 papers. 50 of his pupils and coworkers attained scientific degrees. Finally, a list of the scientific publications and manuscripts is given. There are 1 figure and 92 Soviet references.

Card 4/4

ACCESSION NR: AT4020707

S/0000/63/000/000/0160/0165

AUTHOR: Krivosheyeva, I. A.; Razumov, A. I.; Teytel'baum, B. Ya.;
Yagfarova, T. A.

TITLE: Studies on the derivatives of phosphonic and phosphonous acids. XIX. Study of the polymerization of the butyl- and allyl-isopropenyl esters of ethylphosphonic acid

SOURCE: Karbotsepnny*ye vy*sokomolekulyarny*ye soyedineniya (Carbon-chain macromolecular compounds); sbornik statey. Moscow, Izd-vo AN SSSR, 1963, 160-165

TOPIC TAGS: phosphonic acid, phosphonous acid, butyl isopropenyl ester, ally isopropenyl ester, axodiisobutyronitrile, copolymerization, styrene, methylmethacrylate, acrylonitrile ethylphosphonic acid

ABSTRACT: The effect of the isopropenyl group on the polymerizability of esters was investigated by carrying out block polymerization of ethylphosphonates in the presence of 0.5, 1, 2, 3 and 5 mol. % axodiisobutyronitrile as an initiator at 50C for 150 hours or at 70C for 50 hours, in the presence of 1 mol. % benzoyl peroxide at 50C for 90 hours, and in the presence of 2 mol. % titanium tetrachloride in a methylene chloride medium at 50C. All experiments were carried out in an atmosphere of nitrogen. The allyl isopropenyl ester of ethyl phosphonic acid yielded a rubbery polymer which was insoluble in

Card 1/2

ACCESSION NR: AT4020707

the common organic solvents but soluble in hot dimethylformamide. The characteristic viscosity of the block polymer in dimethylformamide was 0.054. With 0.5% azodiisobutyronitrile, a low-molecular viscous polymer was obtained. With higher amounts of this initiator and with benzoyl peroxide, a solid polymer was formed, although in the presence of the latter the reaction proceeded more slowly. The butylisopropenyl ester of ethylphosphonic could not be polymerized. In order to modify the properties of polystyrene, polymethylmethacrylate and polyacrylonitrile, both ethylphosphonic acid esters were copolymerized with these polymers at 50-70C in nitrogen, for 18 hours (for methylmethacrylate) up to 200 hours (for styrene), in the presence of 1 mol. % axodisobutyronitrile based on the amount of monomers. The experimental data are tabulated, and the copolymers obtained are described. The thermomechanical properties of these copolymers are shown in graphs of deformation against temperature. Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskyy institut im. S. M. Kirova (Kazan Chemicotechnological Institute)

SUBMITTED: 04Jun62

DATE ACQ: 20Mar64

ENCL: 00

SUB CODE: CH
Card 2/2

NO REF SOV: 005

OTHER: 001

ACCESSION NR: AP4035819

8/0020/64/156/001/0145/0148

AUTHOR: Teytel'baum, B. Ya.; Anoshina, N. P.

TITLE: Differential thermal analysis of low temperature crystallization of natural rubber.

SOURCE: AN SSSR. Doklady*, v. 156, no. 1, 1964, 145-148

TOPIC TAGS: natural rubber, crystallization, differential thermal analysis

ABSTRACT: The purpose of this investigation was to find any crystalline phases on the differential thermal analysis (DTA) curves and to develop a DTA method for following the crystallization process. A recent publication treated DTA of the melting of crystalline phases in gutta-percha, balata, natural rubber and synthetic rubber [W. Cooper and R. K. Smith, J. Polym. Sci. A., 1, 159 (1963)]. The obtained results, however, for natural rubber were very indefinite. In this work cooling curves were recorded on a Kuzakov pyrometer PK-52 with chromel-alumel thermocouples. Synthetic rubbers SKEM and SKLD were used as standards since they display no thermal effects in the investigated temperature region. Heating of samples was conducted in a massive aluminum block, furnished with a long protrusion

Card

1/2

ACCESSION NR: AP4035819

for immersion into a Dewar flask with liquid nitrogen (during cooling) and having a heater coil. Heating was conducted according to the linear program. The specimens were cooled to -25 C and kept there from 1 to 8 hours, which resulted in intensive crystallization of the natural rubber. Following this the samples were cooled to -50 or -60 C and then they began to be heated, taking the heating curves. The results of experiments at a rate of heating of 2 deg/min show that the content of the crystalline phase during thermostating at -25 C increases, approaching some limit after 8-9 hours. It is noted that the clear thermograms obtained are not expiring the sensitivity of the apparatus by far, thus it is planned to investigate the crystallization processes not only in pure natural rubber, but also in mixtures of rubber and in weakly crystallizing rubber and other polymers. Orig. art. has: 4 figures.

ASSOCIATION: Khimicheskiy institut im. A. Ye. Arbutova Akademii nauk SSSR (Chemistry Institute, Academy of Sciences SSSR)

SUBMITTED: 28Dec63

SUB CODE: MT

NO REF SOV: 005

ENCL: 00

OTHER: 003

Card

2/2

ACCESSION NR: AP4042215

S/0020/64/157/002/0433/0436

AUTHOR: Gubanov, E. F.; Anoshina, N. P.; Teytel'baum, B. Ya.

TITLE: Effect of mastication on the crystallization processes in natural rubber

SOURCE: AN SSSR. Doklady*, v. 157, no. 2, 1964, 433-436

TOPIC TAGS: rubber, natural rubber, rubber crystallization, rubber mastication, deformation curve, isothermal deformation curve, thermographic curve, chain length, primary structure

ABSTRACT: The crystallization processes in masticated specimens of natural rubber have been studied by recording isothermal-deformation curves and by thermography. The experiments were conducted with specimens of smoked sheet rubber masticated in air at 45-50C on a laboratory mill for 5, 10, 20, 40, and 60 min. Deformation curves recorded under alternating loads of 7.04 and 0.64 kg/cm² at -25C (optimum crystallization temperature) are given in Fig. 1 of the Enclosure. The thermographic curves were recorded with a PK-52

Card 1/5

ACCESSION NR: AP4042215

pyrometer. The specimens were first heated to 50—55C, then crystallized at -25C, and finally cooled to below -50C. The recording was conducted during a steady temperature increase at the rate of 2 deg/min. The degree of crystallization of the specimens was evaluated by the area values of the endothermal effects, Q_{melt} , which correspond to the melting of the crystal phase. The dependence of Q_{melt} on the duration of mastication is given in Fig. 2. The results of the study indicate that mastication of natural rubber definitely affects the process of its low-temperature crystallization. An attempt is made to explain this phenomenon by evaluating factors which affect the origination and growth of crystals, such as decrease of the chain length and destruction of regular primary structures (bundles). The importance of similar studies of other crystallizing rubbers is stressed. Orig. art. has: 4 figures.

ASSOCIATION: Khimicheskii institut im. A. Ye. Arbuzova Akademii nauk SSSR (Chemical Institute, Academy of Sciences, SSSR); Institut organicheskoy khimii Akademii nauk SSSR, Kazan (Institute of Organic Chemistry, Academy of Sciences, SSSR)

Card 2/5

ACCESSION NR: AP4042215

SUBMITTED: 06Mar64

SUB CODE: MT, SS

ATD PRESS: 3073

NO REF SOV: 005

ENCL: 02

OTHER: 001

Card 3/5.

ACCESSION NR: AP4042215

ENCLOSURE: 01

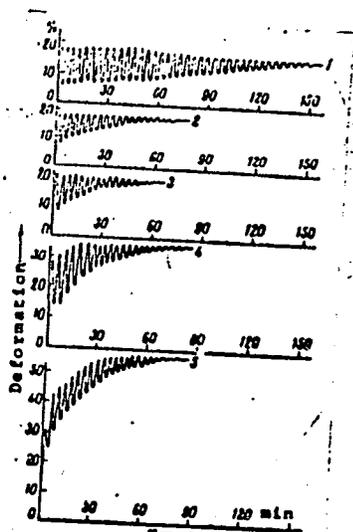


Fig. 1. Isothermal deformation curves at -25C

1 - Initial rubber; 2, 3, 4, and 5 - the same rubber masticated for 5, 10, 40, and 60 min.

Card 4/5

ACCESSION NR: AP4042215

ENCLOSURE: 02

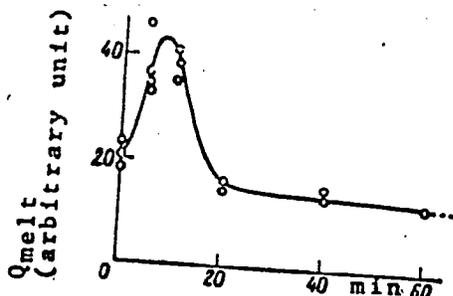


Fig. 2. Dependence of Q_{melt} , which is proportional to the quantity of the crystalline phase formed at -25°C for 1 hr, on the mastication time.

Card 5/5

TEITEL'BAUM, B. Ya.

FA 14T97

USSR/Chemistry - Systems, Binary
Chemistry - Piperidine

Apr 1947

"Physico-chemical Analysis of the System: Water--
Piperidine," B. Ya. Teitel'baum, N. A. Trifonov,
V. R. Khachatur'yan, 6 pp

"Zhur Fiz Khim" Vol XXI, No 4

Gives experimental data illustrated with tables
and graphs. It is concluded, among other things,
that thorough study of the system indicates a
formation of dihydrate of piperidine $C_5H_{10}NH \cdot$
 $2H_2O$, in a state of thermic dissociation.

14T97

TEITEL'BAUM, B. Ya.

Jun 1947

USSR/Chemistry - Systems, Binary
Chemistry - Conductivity, Electric

"The Electric Conductivity of Systems Formed by Water and Phenol, and Piperidine and Chloral," N. A. Trifonov, V. F. Ust'Kachkintsev, B. Ya. Teitel'baum, 9 pp

"Zhur Fiz Khim" Vol XXI, No 6

Describes materials, apparatus, method of carrying out experiment, results and evaluation of data. Chemical formulae, describing process, is included in discussion.

PA 14T110

IA 1T87

TEYTELBAUM, B. Ya.

USSR/Physical Chemistry
Piperidine

1 May 1947

"Physical Chemical Analysis of the System of Water -
Piperidine," B Ya Teyetl'baum, N A Trifonov, V R
Khachatur'yan, 4 pp

"Dok Akad Nauk USSR Nov Ser" Vol LVI, No 4

1T87

TEYTEL'BAUM, B. YA.

USSR/Chemistry - Surface Tension, Mar/Apr 1948
Calculation of

Chemistry - Bubbles, Formation of

"Experimental Research in Determining the Surface Tension of Fluids by the Maximum Pressure for the Formation of Bubbles," B. Ya. Teytel'baum, Lab of Phys and Colloidal Chem, Rostov State U imeni V. M. Molotov, 9 pp

"Kolloid Zhur" Vol I, No 2

Photoregistering manometer was used in experiments to determine the pressure changes during the formation of bubbles under various conditions. Measurement of the pressure fall after the formation of

70716

USSR/Chemistry - Surface Tension, Mar/Apr 1948
Calculation of (Cont'd)

gas bubble are recommended as means of oriented determination of tension. Submitted 25 Mar 1947.

70716

PA 39/49T10

TEYTEL'BAUM, B. YA.

USSR/Chemistry - Systems
Chemistry - Organic Compounds
Mar 49

"Surface Stratification in Binary Fluid Systems,"
B. Ya. Teytel'baum, Chem Inst Imeni A. Ye. Arbuzov,
Kazan Affiliates, Acad Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol LXV, No 3

Studies binary systems of organic liquids in attempt
to establish that regularities manifested may
be transferred to other systems, in particular
to water. Uses mesitylene-methanol system to
derive a diagram of surface tension, curves of
volume and surface stratification, and polytherms

39/49T10

USSR/Chemistry (Contd) Mar 49

of surface tension for solutions in the case of
surface stratification. Submitted by Acad A.
Ye. Arbuzov, 20 Dec 48.

39/49T10

TEYTEL'BAUM, B.Ya; GANELINA, S.G.; GORTALOVA, T.A.

Study of the surface layer in liquid systems. Part 3: Surface
tension and foam formation in the system consisting of vapor,
cymene, and methyl alcohol. Izv.Kazan.fil.AN SSSR Ser.khim.nauk
no.1:105-114 '50. (MLRA 10:5)
(Surface tension) (Foam) (Systems (Chemistry))

TEYTEL'BAUM, B.Ya.; SIDOROVA, Ye.Ye.; GANELINA, S.G.

Study of the surface layer in liquid systems. Part 4. Surface stratification and foam formation in certain binary systems of organic liquids. Izv.Kazan.fil.AN SSSR Ser.khim.nauk. no.1:115-124 (MLRA 10:5)

'50.

(Surface tension) (Foam) (Systems (Chemistry))

CA

The surface layer of liquid systems. 1. Surface tension of binary liquid systems in the instance of surface separation of layers. B. Ya. Tselibaum, T. A. Gortseva, and S. G. Garelina (Acad. Sci. U.S.S.R., Kazan). *Kolloid. Zhur.* 12, 204-202(1950); cf. C.A. 43, 2247A.

Surface tension σ ergs/cm. was detd. by the method of max. pressure in bubbles. The σ of mesitylene (I) was 30.47, 30.00, 29.53, 29.06, 28.64, 28.17, 27.64, 27.09, and 26.71, and of MeOH 24.44, 23.91, 23.50, 23.02, 22.50, 22.00, 21.51, 21.21, and 20.67, at 0, 5, 10, 15, 20, 25, 30, 35, and 40°; of PhNH₂ 48.12, 44.78, 44.02, 43.40, 42.84, 42.16, 41.46, 40.80, 40.15, 39.60, 39.04, 38.63, and of cyclohexane (II) 25.84, 25.36, 24.74, 24.26, 23.63, 23.06, 22.30, 21.77, 21.28, 20.66, and 20.26 at 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, and 60°. The σ of I-MeOH mixts. did not decrease with increasing temp. as regularly; e.g., σ for 10 mol. % MeOH soln. was 29.64, 29.23, and 28.75 at 5, 10, and 15°, and σ for 20% MeOH 28.47, 28.24, 28.24, 28.78, and 28.62 at 5, 10, 15, 20, and 25°. At MeOH > 60% σ behaved normally. The abnormal temp. coeff. of σ is noticeable within the widest temp. range at 30% MeOH; there 28° is its upper limit. These temp. and concns. are the coordinates of the upper crit. point of surface soln.; at lower temp., within a concn. range (e.g., 10-60% MeOH at 0°), 2 surface layers are present. This crit. point is 21° above the crit. point of bulk soln. In the system II-PhNH₂, the upper crit. point of surface soln. is at 40° (i.e. 9° above the crit. point of bulk soln.) and 60 mol. % II. At 0°, 2 surface layers are present between approx. 2 and 30% II. At 5° II, σ is, e.g., 37.80, 37.80, and 37.62 at 5, 10, and 15°. At 10% II, σ is, e.g., 32.80, 32.80, 32.18, 32.21, 32.20, and 32.10 at 10, 15, 20, 25, 30, and 35°. Above the crit. point of surface soln., the temp. coeff. of σ is independent of temp. but abnormally small within the concn. range corresponding to sep. of layers. Thus, in I-MeOH 40%, $d\sigma/dT$ is -0.011 between 25 and 40°, and in II-60, PhNH₂ 60%, $d\sigma/dT$ is -0.011 between 30 and 40°. A large crit. point of surface soln. with large neg. $d\sigma/dT$ between two moderate $d\sigma/dT$ occurred in the system II-O-calcitine. Cf. Mortell, C.A. 80, 642. I. I. Biherman

The surface layer of liquid systems. II. From formation in binary liquid systems in which surface demixing takes place. B. Ya. Teltelbaum (Kazan Branch, Acad. Sci. U.S.S.R., Kazan) *Vysokomol. Zhur.* 12, 375-85 (1957); cf. C.A. 44, 10419f. Sealed ampuls contg. 2 cc. of liquid and about 4 cc. of air were shaken by hand and the time required for all the bubbles but two to disappear was noted. At 0°, in solns. of x mol % MeOH and $(100-x)$ % n-pentane, τ was max. (189 sec.) at $x = 50$; with MeOH and n-pentane τ was max. (29 sec.) at $x = 45$; with MeOH and toluene or benzene the max. τ (8 and 4 sec.) was at $x = 35$ and 30, resp. In the system 1 + EtOH, τ was max. (20 sec.) at $x = 40$. τ was smaller at higher temp.; thus, the max. τ of MeOH-1 mixts. was 44 and 12 sec. at 20° and 40°, and of toluene-MeOH mixts. 142, 55, and 14 sec. at 0°, 20°, and 40°, resp. The temp. effect was studied more thoroughly on MeOH-1 mixts. At $x = 15$, τ was max. (44 sec.) at 13°. At $x = 30$, τ was max. (80 sec.) at 10°, and decreased slowly with increasing temp. and rapidly when temp. decreased; below -2.5° τ was zero and vol. demixing was observed. At $x = 50$, τ was max. at 1° and decreased to zero at about -5° when 2 layers formed. At $x = 74$, τ was approx. 115, 55, 40, and 5 sec. at -21°, -14°, -10°, 0°, and 40°, resp., and the vol. demixing took place at -12°. These results can be understood if it is assumed that demixing occurs in the surface layer at a higher temp. than in the bulk. Presumably, at $x = 50$ or less the surface emulsion and the vol. emulsion spread or form "alc.-in-oil" type; the droplets of the vol. emulsion are on the sub-air interface and destroy foam. At x greater than 50%, the emulsion is of the "oil-in-alc." type; the droplets of the vol. emulsion are wholly surrounded by the dispersion medium and do not come in contact with the surface emulsion which, thus, can cause foamless. Surface conditions are necessary for foaming. The τ of EtOH-gasoline (1:3 vol.) mixts. increased with the b.p. of the gasoline. J. J. Bikertman

24

TEITEL'BAUM, B. YA.

"Viscosity of systems of benzene and its homologues with lower alcohols."
B. Ya. Teitel'baum, T. A. Cortalova, and S. G. Ganelina. (p. 1422)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1950, Vol 20, No 20

CA

Temperature coefficient of the surface tension of binary liquid systems. B. Ya. Zeltelbaum (A. E. Arbasov Chem. Inst., Kazan Branch Acad. Sci. U.S.S.R.). *Doklady Akad. Nauk S.S.S.R.* 71, 705-8(1959).—In a system of 2 components, high surface activity results in a decrease of the temp. coeff. γ^* of the surface tension γ of the 1st component with increasing concn. c of the 2nd component, i.e. $d\gamma^*/dc < 0$. That relation being valid at both ends of the binary system, the curve of γ^* as a function of the compn. will pass through a min. If the deviation of the surface soln. from the ideal state is pos., i.e. if decrease of the temp. leads to surface layering, the surface entropy of mixing, $\Delta\gamma$, is neg., and the binary system passes through a min.; in the presence of interaction between the components in the surface film, $\Delta\gamma$ is pos., and the system passes through a max. Combination of the 2 factors may result in a curve of complex shape, with minima and maxima. A deep min. in the γ^* isotherm was found in the systems mesitylene-MeOH, *p*-cymene-

MeOH, PhNH₂-cyclohexane, and in some aq. solns. In these systems, the surface film seps. into 2 layers at low temp. Examples of systems with a max. are systems involving formation of hydrates, e.g. H₂O-alc., H₂O-Me₂CO, etc. In terms of the compn. not of the bulk of the soln., but of the surface layer, the γ^* curve at 25° of H₂O-EtOH (compn. data of Zhukhovitskii (C.A. 39, 3192°); Butler and Wightman (C.I. 26, 5811); Guggenheim and Adam (C.A. 27, 1500)) passes through a min. at about 3, a max. around 40, and another min. at about 74 mole % EtOH. The system H₂O-MeOH, also in terms of the compn. of the surface layer, shows no distinct max., but otherwise the curve has the same shape as in H₂O-EtOH. The greatest deviation from additivity is situated around the equimol. compn., which relates the effect to hydration through H bonding. With higher alcs., the max. is even more pronounced than with EtOH. Hydration in the surface layer, which is not expressed in curves of γ itself, does manifest itself in curves of the temp. coeff. γ^* .
N. Thon

TETEL'BAUM, B. Ya.

USSR/Chemistry - Gas Analysis Geology-Prospecting

Sep 51

"A New Automatic Gas Burette"

Nauka i Zhizn'" Vol XVIII, No 9, p 29

The analysis of a mineral or rock normally requires a long time (up to several days), while with the new device developed by L. G. Berg, Prof of Chem Inst imeni Arbuzov, Kazan' Affiliate, Acad Sci USSR, B. Ya. Tetel'taum, and S. G. Ganelina it can be done in 30 min. The method is based on the principle of phase analysis developed by Berg. As every mineral evolves gases (H₂O, O₂, etc.) at sp temps, any rock can be identified by measuring the vol of gases evolved by a definite quantity of it in the powdered state on heating. The measurement of the gas vol is automatic: when an Hg drop has reached the last division of the scale, there is a click, a red lamp lights up, and a new drop of Hg appears at the bottom of the scale.

PA 213T22

TEYTEL'BAUM, B. YA.

PA 190T17

USSR/Chemistry - Solvents

Aug 51

"Determination of the Surface Tension of Aqueous Solutions of Lower Alcohols at Various Temperatures,"
B. Ya. Teytel'baum, T. A. Gortalov, Ye. Ye. Sidorova,
Chem Inst imeni A. Ye. Atbuzov, Kazan' Affiliate Acad
Sci USSR

"Zhur Fiz Khim" Vol XXV, No 8, pp 911-919

Consideration of temp coeffs of surface tension
detd from measurements carried out on aqueous solns
of methyl, ethyl, n-propyl, n-butyl, and isobutyl
alcs led to the conclusion that alc hydrates are
formed in the surface layer of solns.

LC

190T17

TEYTEL'BAUM, B. YA.

LC

192T39

PA 192T39

USSR/Chemistry - Surface Tension Sep 51

"Investigation of the Surface Tension of Aqueous Solutions of Acetone, Methylglyoxal, Pyridine, and Chloral," B. Ya. Teytel'baum, S. G. Ganelina, F. A. Gortalova, Chem Inst imeni A. Ye. Arbutov, Kazan' Affiliate Acad Sci USSR

"Zhur Fiz Khim" Vol XXV, No 9, pp 1043-1049

On the basis of temp coeffs of surface tension in the systems studied, concluded that there is formation of solns of hydrates in surface layer.

LC

192T39

USSR/Chemistry - Surface Tension (Contd) Sep 51

Showed that whenever a weakly dissociated compound is formed, the max of the temp coeff indicates the compound of that compound.

USSR/Chemistry - Measurement of Gas Volumes 11 Aug 51

"Investigation of Gas Evolution Processes By Automatic Recording of the Volume of Gases On a Kurmakov Temperature Recorder," L. G. Berg, B. Ya. Teitel'baum, Chem Inst Imeni A. Ye. Arbuzov, Kazan' Affiliate, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol LXXIX, No 5, pp 791-794

An automatic gas burette combined with stepwise heating is satisfactory when the qual compn of the gas is known: Otherwise slow gradual heating and frequent measurements of the temp of the sample (by means of a thermocouple) and vol of evolved

210722

USSR/Chemistry - Measurement of Gas Volumes (Contd) 11 Aug 51

Gas must be used. This can be done on a special temp recorder assembly in which a calibrated resistance wire (Pt or nichrome) sheathed in a mercury-filled tube (gas burette) serves as one of the legs of a bridge. T, Δt, and V can then be measured simultaneously. An investigation of the decompn of dolomite on heating and dehydration of Mg(OH)₂ - Ca(OH)₂ are cited as illustrations of the use of this assembly. Various stages of these conversions corresponding to individual reactions can be distinguished and evaluated.

210722

TEITEL'BAUM, B. Ya.

TEYTEL'BAUM, B.Y.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
General and Physical Chemistry

Surface de-mixing and foam formation. B. Ya. Teitel'
baum. *Colloid J.* (U.S.S.R.) 14, 331-5 (1952) (Engl.
translation).—See C.A. 46, 9380d. H. L. H.

① Citations

8-31-54
JPH

TEYTEL'BAUM, B. YA.

USSR/Chemistry, Colloid - Foams

Jul/Aug 52

"Investigation of Surface Films of Liquid Systems. V. Foam Formation in Some Ternary Systems Consisting of Organic Liquids," B. Ya. Teytel'baum, . . . S. G. Ganelina, Chem Inst imeni A. Ye. Arbuzov, Kazan' Affiliate, Acad Sci USSR

"Kolloid Zhur" vol XIV, No 4, pp 267-269

Measured at 0° the stability of foams formed by 3 complete ternary systems: nitrobenzene plus cyclohexane with (1) piperidine, (2) ethyl alc and (3) p-cymene; established and formulated the relationships which influence the stability of foams in these systems.

225T14

1. TEYTEL'BAUM, B. YA., SIDOROVA, YE. YE.

2. USSR (600)

4. Foam

7. Investigation of the surface layer of liquid systems. Part 6. Stability of elementary foam. Koll. zhur. 14, no. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

TEYTEL'BAUM, B.Ya.; BERG, I.G.

Thermal analysis by registration of the volume of evolved gases. Zhur. Anal.
Khim. 8, 152-7 '53. (MLRA 6:5)
(CA 47 no.20:10283 '53)

1. A.E. Arbusov Chem. Inst., Kazan Branch Acad. Sci. U.S.S.R.

TEYTEL'BAUM, B.Ya., kandidat khimicheskikh nauk.

First conference on thermography. Vest.AN SSSR 23 no.9:84-85 S '53.

(MLRA 6:10)

(Thermal analysis--Congresses)

TEYTEL'BAUM, B.Ya.

Remarks on interface separation (answer to the article by G.L.Starobinets, I.Z.Fisher, and M.G.Mil'china. "Interface separation.")
Koll.shur. 16 no.4:309-311 J1-Ag '54. (MLRA 7:7)

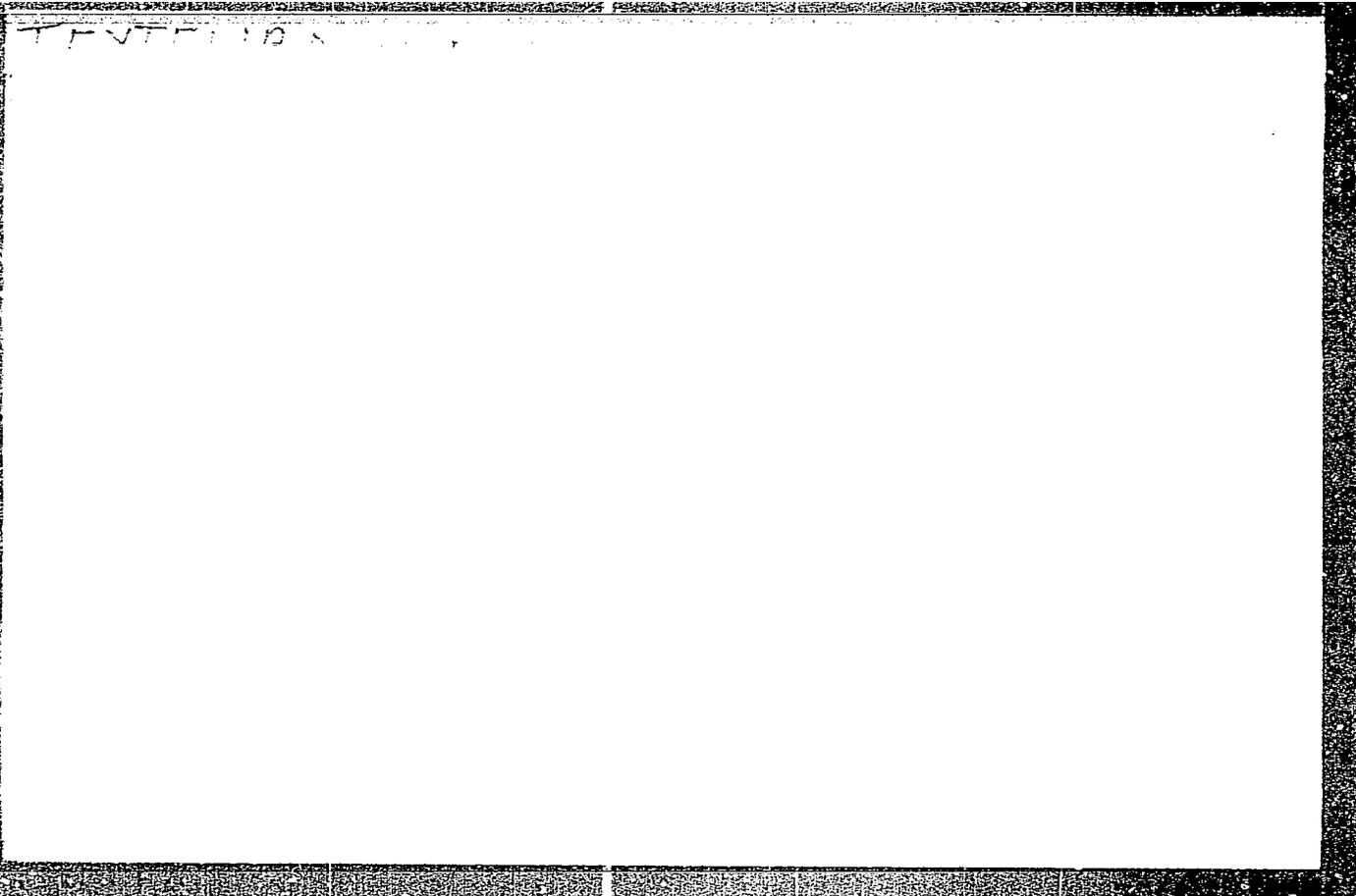
1. Khimicheskiy institut im. A.Ye.Arbusova, Kazanskiy filial
Akademii nauk SSSR.
(Surface chemistry) (Starobinets, G.L.) (Fisher, I.Z.)
(Mil'china, M.G.)

ТЕЙТЕЛ'БАУМ, Б.ІА.

STAROBINETS, G.L.

[Once more about interface separation (Answer to the article of
B.IA.Teitel'baum "Remarks on interface separation".) Koll.zhur.
16 no.4:312 J1-Ag '54. (MLBA 7:7)

1. Belorusskiy gosudarstvennyy universitet im. V.I.Lenina, Minsk.
(Surface chemistry) (Teitel'baum, B.IA)



TEYTEL'BAUM, B. Ya.

"Formation of Dispersed Systems on the Surface Layer of Solutions"
(Obrazovaniye dispersnykh sistem v poverkhnostnom sloye rastvorov) from
the book Trudy of the Third All-Union Conference on Colloid Chemistry,
pp. 349-356, Iz. AN SSSR, Moscow, 1956

(Report given at above Conference, Minsk, 21-4 Dec 53)

Author: Chemical Institute im. A. Ye. ARBUZOV, Kazan Affiliate AS USSR

in 1955

TEYTEL'BAUM, B. Ya. was given/as member of Chemical Inst. im A. Ye. ARBUZOV,
Kazan Affil. in Khimiya Primennaya Fosfoorganicheskii Soyedennyi, Moscow, 1957. Uncl.

TEYTEL'BAUM, B.Ya.

AUTHOR: TEYTEL'BAUM, B.Ya. 32-6-41/54
TITLE: Apparatus for Automatic Conductometric Titration. (Pribor dlya
avtomaticheskogo konduktometricheskogo titrovaniya, Russian)
PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol 23, Nr 6, pp 753-756 (U.S.S.R.)

ABSTRACT: For the analysis by conductometric titration it is sufficient to compare the values of the electric conductivity of the solutions in the course of titration. In this case the sound frequency alternating current is used, and measurements are carried out according to the scheme of the balanced bridge of resistance.

In certain cases these measurements were carried out according to the scheme of the non-balanced bridge. In this case a permanent resistance is connected and the modifications of conductivity are determined by means of a galvanometer connected with the measuring diagonal of the bridge. Analysis is carried out by adding small quantities of the reagent (0,2 - 1,0 ml) and the measuring points obtained are used for forming the titration curve. This process can be rendered more precise and more rapid by automation and photo-registration. The use of the necessary apparatus is described. (With 5 Drawings).

Card 1/2

Apparatus for Automatic Conductometric Titration.

32-6-41/54

ASSOCIATION: Kazan Branch of the Academy of Science of the U.S.S.R.

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SUBMITTED:

AVAILABLE: Library of Congress

Card 2/2

TEYTEL'BAUM, B.Ya.; SOGOLOVA, T.I.; SLONIMSKIY, G.L.

Thermomechanical curve method applied in polymer studies.
Vysokom. soed. 4 no.12:1879-1880 D '62. (MIRA 15:12)

1. Khimicheskiy institut imeni A.Ye. Arbuzova AN SSSR,
Fiziko-khimicheskiy institut imeni L.Ya. Karpova i Institut
elementoorganicheskikh soedineniy AN SSSR.
(Polymers)

TEYTEL'BAUM, B.Ya.; ANOSHINA, N.P.

Thermographic study of the crystallization of stereoregular butadiene
SKD rubber. Vysokom.soed. 7 no.7:1188-1191 J1 '65.

(MIRA 18:8)

1. Khimicheskiy institut imeni Arbuzova AN SSSR.

ACCESSION NO. 1151-1154

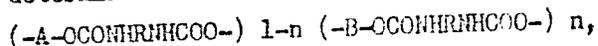
AUTHORS: Bukhary, E. F.; Ginyaskiy, A. G.; Apukhtina, N. F.; Faytel'baum, B. Ya.

TITLE: On the crystallization and glass transition of polyurethane block-copolymers

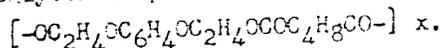
SOURCE: AN SSSR. Doklady, v. 163, no. 5, 1965, 1151-1154, and insert facing p. 1152

TOPIC TAGS: polyester, polyurethane, polymer, resin, crystallization, glass transition, block copolymer

ABSTRACT: The glass transition temperature, Tg, and the effect of crystallization on the latter were determined for block-copolymers



where A is polyethyleneglycol adipate (I) or polydiethyleneglycoladipate (II), and B is



Three different isomers of B were studied: para, meta, and ortho, designated in what follows as p-B, m-B, and o-B respectively. The glass transition

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L 64480-65

ACCESSION NR: AP5021281

6

temperature was determined after B. Ya. Teytel'baum and M. P. Dianov (Vysokomolek. soyed., 3, 524, 1961). The experimental results are shown graphically in Figs. 1, 2, and 3. It is concluded that crystallization processes influence the glass transition temperature of block-copolymers. Crystallization of component with lower T_g lowers the T_g of the block-copolymer. The higher component acts as an internal plasticizer in the crystallization of the lower component. Content of the block-copolymer. Orig. art. has: 3 graphs, 2 microphotographs, and 2 equations.

44.35

ASSOCIATION: Institut organicheskoy khimii, Akademii nauk SSSR Kazan' (Institute for Organic Chemistry, Academy of Sciences USSR); Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskoy khimii im. N. S. Lebedeva, Leningrad (All-Union Research Institute for Synthetic Rubber)

SUBMITTED: 12Jan65

ENCL: 03

DATE: 1/12/65

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NO REF SCV: 005

OTHER: 001

Card 2/5

L 64480-88

ACCESSION NR: AP5021221

ENCLOSURE: 01

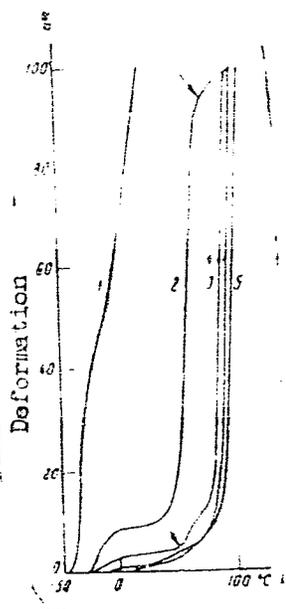


Fig. 1. Thermomechanical curves for the copolymer series II - m - B. steady load 18 kg/cm². 1- 0; 2- 30; 3- 60; 4- 80; 5- 100 mole% m - B. Arrows indicate the onset of crystallization during heating.

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L 64480-65

ACCESSION NR: AP5021281

ENCLOSURE: 02

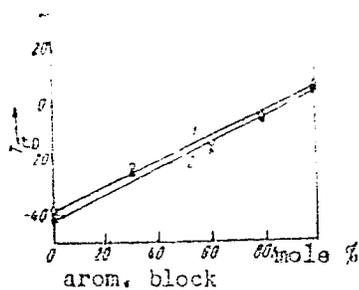


Fig. 2.

Dependence of Tg on the copolymer composition in the series II - m-B.
1- amorphous specimens; 2- specimens kept at room temperature for
2 months

Card 4/5

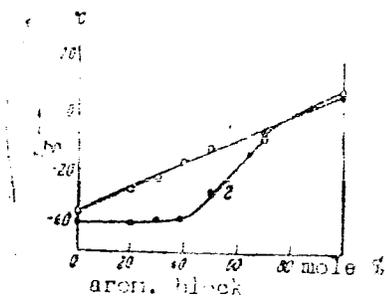


Fig. 3.
Dependence of Tg on the copolymer composition in the series I - m-B.
1- amorphous specimens; 2- specimens kept at room temperature for
6 months

Card 5/5 *50*

~~TYTUNOVA, D. I.; SHAROV, E. I.; ANDRUSHEV, E. P.; DEJNEV, . . . ;
KOROTKOV, E. N.~~

Evaluation of the molecular weight of linear polymers by the
thermochemical method. Vysokom. soed. 7 no.2:299-302 P 145.
(CPLA 18:3)

L. Institut organicheskoy khimii AN SSSR, Sverdlovskiy
Institut khimii A.Ye. Arbusova AN SSSR.

YEFREMOV, Yu.Ya.; BIKULATOV, T.A.; TEYTEL'BAUM, B.Ya.

Reconstruction of an isotopic mass spectrometer to make it
suitable for chemical investigations. Prib. i tekhn. eksp.
8 no.6:180-181 N-D '63. (MIRA 17:6)

1. Institut organicheskoy khimii AN SSSR, Kazan'.

TEYTEL'BAUM, B. Ya.; ANOSHINA, N. P.

Thermographic study of the low-temperature crystallization of
natural rubber. Dokl. AN SSSR 156 no. 1:145-48 My '64.
(MIRA 17:5)

1. Khimicheskiy institut im. A. Ye. Arbuzova AN SSSR.
Predstavleno akademikom B. A. Arbuzovym.

TEYTELBAUM, B. Ya
У С С К .

✓The surface layer of liquid systems. VII. Surface stratification and the volume properties of solutions of binary systems. B. Ya. Teitelbaum and O. A. Osipov (V. M. Molotov Univ. Rostov), *Kolloid. Zhur.* 17, 57-62 (1955); cf. *C.A.* 48, 4536. The activity coeffs. of the 2 components of a binary system may, in the surface layer, be different from those in bulk; thus, the soly. in the surface layer may be incomplete also at temp. T at which the miscibility in bulk is unlimited; hence, de-mixing in a surface layer may occur at any temp. Contrary to Starobinets, *et al.* (*C.A.* 47, 9103b), surface de-mixing need not have any effect on the vol. properties of the soln. O_2 NPh and hexane (I) show a sharp max. of foam persistence (after shaking) at 60 mol. % I. The surface tension σ of O_2 NPh and I decreases nearly linearly when T rises, but σ of 20-30% solns. of I in O_2 NPh is almost independent of T (between 0° and 50°). Presumably, surface de-mixing takes place in these solns. The temp. coeff. of the dielec. const. ϵ of I- O_2 NPh mixts. was detd. between 10° and 40° ; it showed no anomaly. Also the variations with T of ϵ and d of PhNH₂-cyclohexane mixts. and of d of a mesitylene-MeOH mixt. were normal. Also in *Colloid J.* (U.S.S.R.), 17, 51-5(1955)(Engl. translation). J. J. Bikerman

Handwritten initials and signature

TEYTEL'BAUM, B.Ya.

Certain general problems in the physicochemical analysis of liquid systems.
Zhur.fiz.khim. 37 no.7:1610-1613 J1 '63. (MIRA 17:2)

1. Khimicheskiy institut imeni Arbuzova AN SSSR.

TEYTEL'BAUM, B.Ya.; GIZATULLINA, V.G.; YAGFAROVA, T.A.

Method of the thermomechanical curves of polymers. Part 4. Vysokom.
soed. 6 no.2:281-286 F '64. (MIRA 17:2)

1. Khimicheskij institut imeni A.Ye. Arbuzova AN SSSR i Institut organicheskoy khimii AN SSSR, Kazan'.

TEYTEL'BAUM, B.Ya.; GUBANOV, E.F.

Effect of the field of force on structural transformations
in natural rubber. Dokl. AN SSSR 153 no.4:878-881 D '63.
(MIRA 17:1)

1. Institut organicheskoy khimii AN SSSR, Kazan'. Predstavleno
akademikom B.A. Arbuzovym.

s/0190/64/006/002/0281/0286

ACCESSION NO: AP4017639

AUTHORS: Teytel'baum, B. Ya.; Gizatullina, V. G.; Yagfarova, T. A.

TITLE: On the methods of thermomechanical curves of polymers. 4. The investigation of powder specimens (beginning with this (No. 4) report, the major title also covers earlier sections 1, 2, and 3)

SOURCE: Vy*sokomolekulyarny*ye soledineniya, v. 6, no. 2, 1964, 281-286

TOPIC TAGS: polymer, powder polymer, compaction, tablet formation, deformation, pressing process, relaxation, elastic deformation, vitrification, thermomechanical curve, polyvinylchloride

ABSTRACT: Problems associated with the recording of thermomechanical curves of powdered materials compression have been considered. Powdered polyvinylchloride PF-4 was used as the issuing material. Tablets, 4 x 2 mm, were pressed under 420 - 4200 kg/cm², sustaining force-induced elastic deformations. When heated under various loads, at temperatures up to 300C, the tablets expanded (the higher the original compression load, the greater the expansion). Beyond 2100 kg/cm² the expansion decreased. It was also found that the duration of the original compression had an effect on the subsequent expansion. The maximum expansion was obtained

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ACCESSION NO: AP4017639

in tablets held in compression for 2 minutes. Heating of the tablets for 1 hour at 100C resulted in a loss of their subsequent ability to expand, their behavior being that of a typical amorphous linear polymer. Samples of powdered polyvinylchloride containing various quantities of comminuted sand or aluminum oxide (when pressed into tablets) showed a lesser degree of expansion, as compared with the 100% pure polymer samples. These samples acquired the capacity of being compressed into monolithic blocks under proper application of heat and pressure. Polycondensation of powdered diallylphthelate with benzylmethacrylate at 150C for 30 minutes yielded products free of expansion ability. Thanks are given to B. M. Zuyev for a sample of the material. Orig. art. has: 5 charts.

ASSOCIATION: Khimicheskiy institut im. A. E. Arbusova AN SSSR (Chemical Institute AN SSSR); Institut organicheskoy khimii AN SSSR, Kazan' (Institute of Organic Chemistry AN SSSR)

SUBMITTED: 12Dec62

DATE ACQ: 23Mar64

ENCL: 00

SUB CODE: CH

NO REF SOV: 005

OTHER: 000

Card 2/2

TEYTEL'BAUM, B.Ya.; YAGFAROVA, T.A.; ANOSHINA, N.P.; NAUMOV, V.A.

Complex investigation of the crystallization of nairit, a
polychloroprene rubber. Dokl. AN SSSR 150 no.3:608-611 My '63.
(MIRA 16:6)

1. Khimicheskiy institut im. A.Ye. Arbuzova i Institut
organicheskoy khimii AN SSSR, Kazan'. Predstavleno akademikom
B.A. Arbuzovym.

(Chloroprene) (Crystallization)